



# West Virginia Correctional Population Forecast 2004-2014

*A Study of the State's Prison Population*

Presented to the Legislative Oversight Committee on  
Regional Jails & Correctional Facilities

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# **Prepared by:**

Theresa K. Lester, *Research Analyst*

Stephen M. Haas, *Director*

**Criminal Justice Statistical Analysis Center**

Wendy P. Naro, *Consultant*

**JFA Associates, LLC**

J. Norbert Federspiel, *Director*

**Division of Criminal Justice Services**



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# WV in a National Context

- According to the Bureau of Justice Statistics (BJS), West Virginia had one of the smallest prison populations in the nation *and* the smallest among southern states in 2003.
  - WV prison population ranked 39<sup>th</sup> in the nation
- Compared to other states, WV has one of the lowest incarceration rates each year.
  - WV ranked 40<sup>th</sup> in the nation at 260 inmates per 100,000 residents in 2003
- WV's rate of incarceration continues to be considerably less than the national average.
  - National rate of incarceration = 482 per 100,000 persons in 2003, compared to 260 inmates in WV

# WV in a National Context

- Violent offenders comprise a larger proportion of the prison population, compared to the national average.
- The percentage of property offenders confined in WV is 7.9% higher than recent national estimates.
- Nationally, the percentage of offenders confined for drug offenses is more than double the percentage in WV.

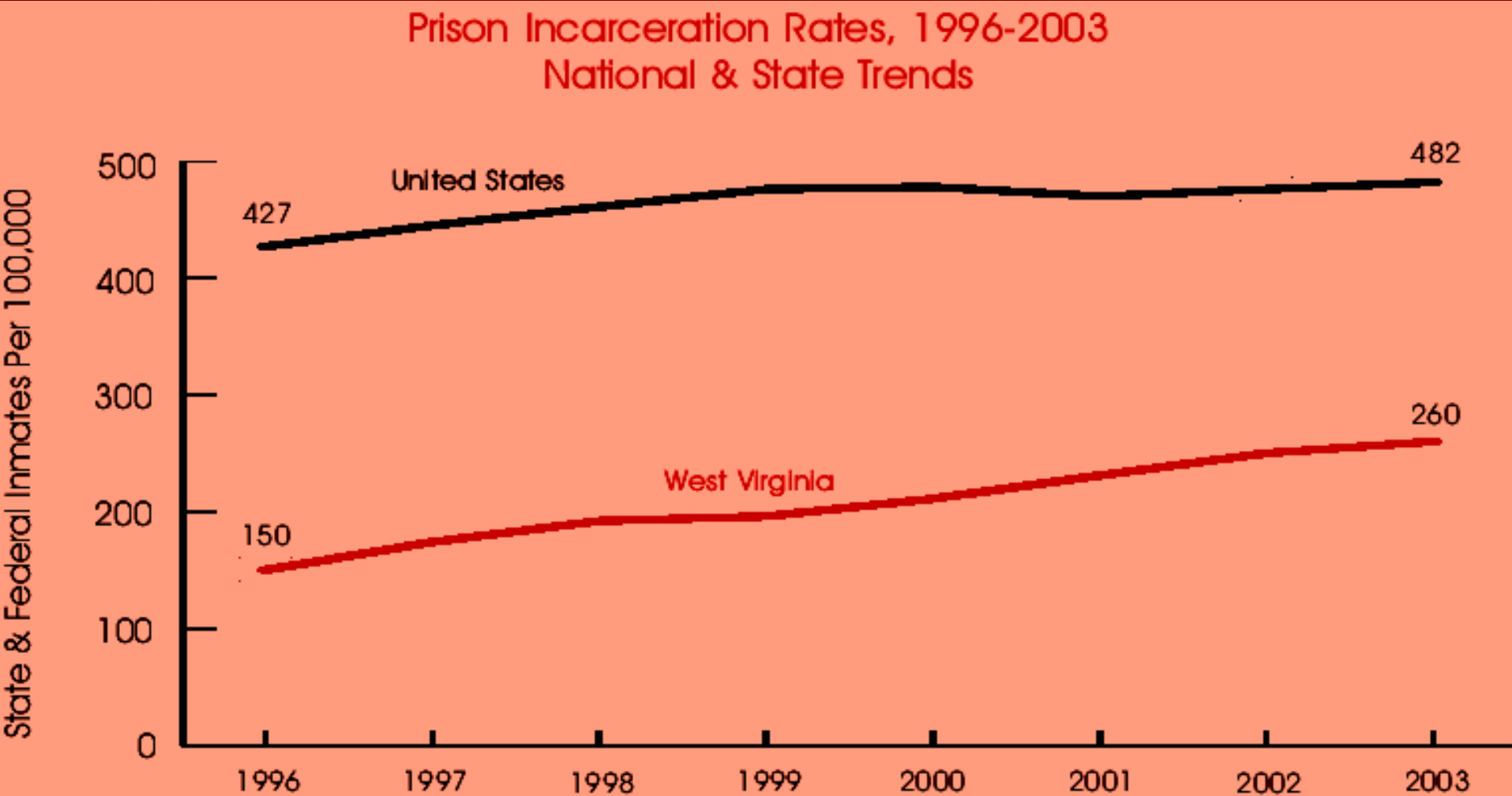
Percentage of Sentenced Inmates by  
Broad Offense Group (US vs WV)

<u>Broad Offense Group</u>	<u>United States 2001</u>	<u>West Virginia 2002</u>	<u>West Virginia 2004</u>
Violent	49.3%	56.1%	52.2%
Property	19.3%	27.4%	27.2%
Drug	20.4%	7.4%	10.0%
Public Order	11.0%	9.2%	10.6%

# WV in a National Context

- Similar to national trends, WV's rate of incarceration has continued to increase over recent years, but is growing at a faster pace compared to other states and the nation.
- According to the Bureau of Justice Statistics (BJS), West Virginia was ranked:
  - 3<sup>rd</sup> in average percent change in the state prison population between 1995-2003 at 8.3%
- Prison incarceration rates, 1996-2003
  - United States: **12.9% increase**, from 427 to 482 inmates per 100,000 residents
  - West Virginia: **73.3% increase**, 150 to 260 inmates per 100,000 residents

# Prison Incarceration Rates, 1996-2003



# Correctional Population Forecast Updates, 2001 & 2003

**Purpose:** To examine the accuracy of the forecasted population in relation to the actual population.

- Previous forecasted projections have been rather accurate, however, the potential for greater error increases with time.
- For any given month since January 2001, forecasted population estimates have been within +/- 3.4% of actual population counts.
- *Correctional Population Forecast – 2001 Update:*
  - For December 2001:
    - Actual Population: 4,008
    - Forecasted Population: 3,934
    - Population difference: 74 inmates or 1.8%

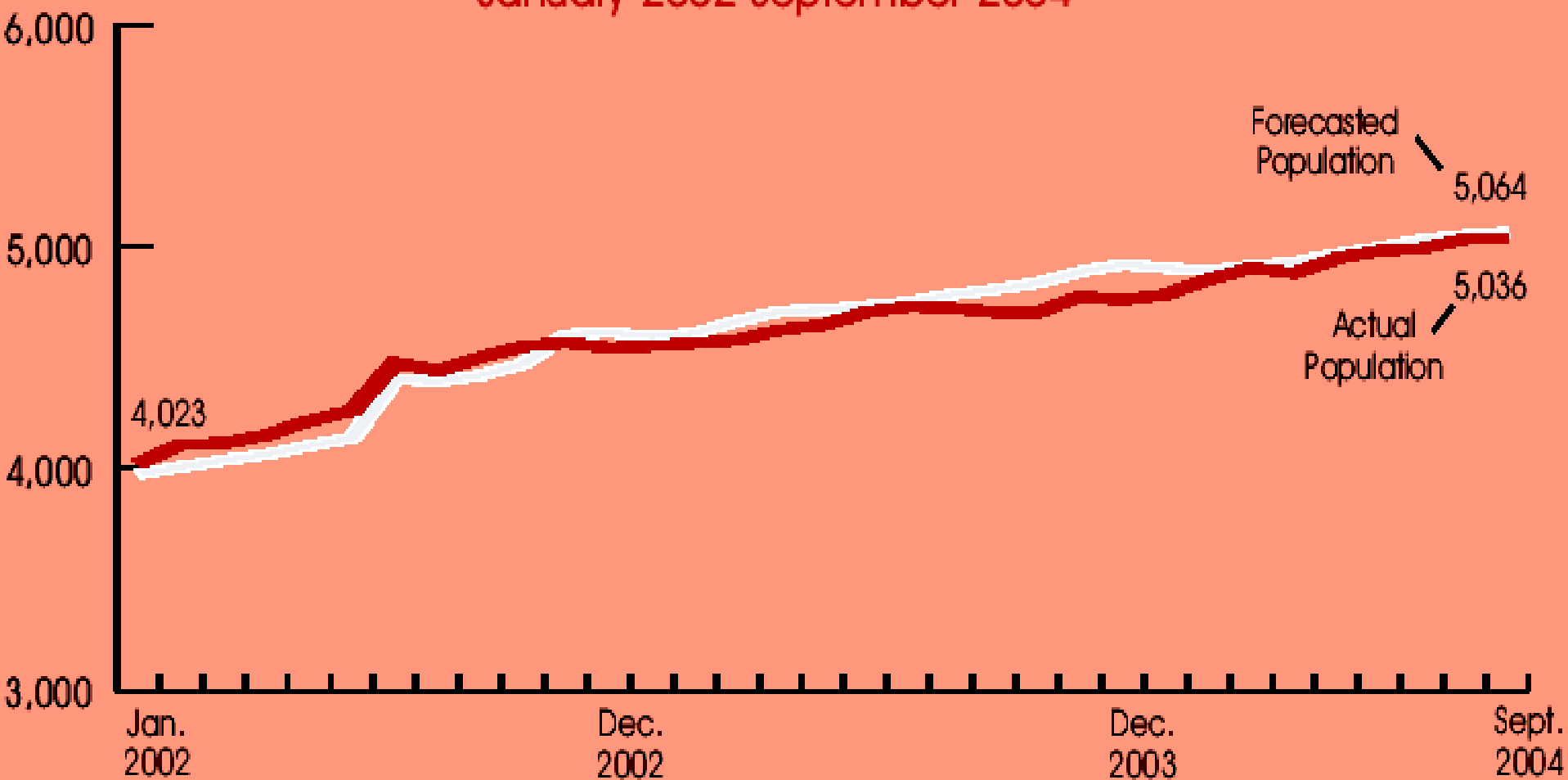


# Correctional Population Forecast Updates, 2001 & 2003

- *Correctional Population Forecast – 2003 Update:*
  - For December 2003:
    - Actual Population: 4,758
    - Forecasted Population: 4,918
    - Population difference: -160 inmates or -3.4%
  
- *Current Unpublished Estimates for 2004*
  - For **September** 2004:
    - Actual Population: 5,036
    - Forecasted Population: 5,064
    - Population difference: -28 inmates or -0.6%

# Forecast Performance, 2002-2004

Actual vs Forecasted Population  
January 2002-September 2004



# Past and Current Forecast Projections for 2009

- We can also examine the “accuracy” of projections by comparing previous forecast estimates for a given year.
- This approach highlights the impact of continual changes in admission, stock, and release figures and illustrates the importance of re-assessing population growth.
- 2009 population projections by bi-annual report:
  - Correctional Population Forecast, 2000-2010 = **5,723 inmates**
  - Correctional Population Forecast, 2002-2012 = **6,260 inmates**
  - Correctional Population Forecast, 2004-2014 = **6,010 inmates**

# Actual Population Counts, 1993-2003

- Actual population counts, 1993-2003:
  - December 1993: **2,110 inmates** (actual population)
  - December 1998: **3,535 inmates** (actual population)
  - December 2003: **4,758 inmates** (actual population)
- This translated into a 125.5% increase in the total number of inmates confined in WV's correctional system between 1993-2003.
- This is compared to an actual average annual growth rate of 8.5% between 1993-2003.
- This corresponded to an average of 265 additional inmates per year during this time period.

# Correctional Population Forecast, 2004-2014

- Population estimates based on 2004-2014 forecast model:
  - September 2004: **5,036 inmates** (actual population)
  - December 2009: **6,010 inmates** (forecasted population)
  - December 2014: **6,992 inmates** (forecasted population)
- This translates into a 38.8% increase in the total number of inmates confined in WV's adult correctional system between 2004-2014.

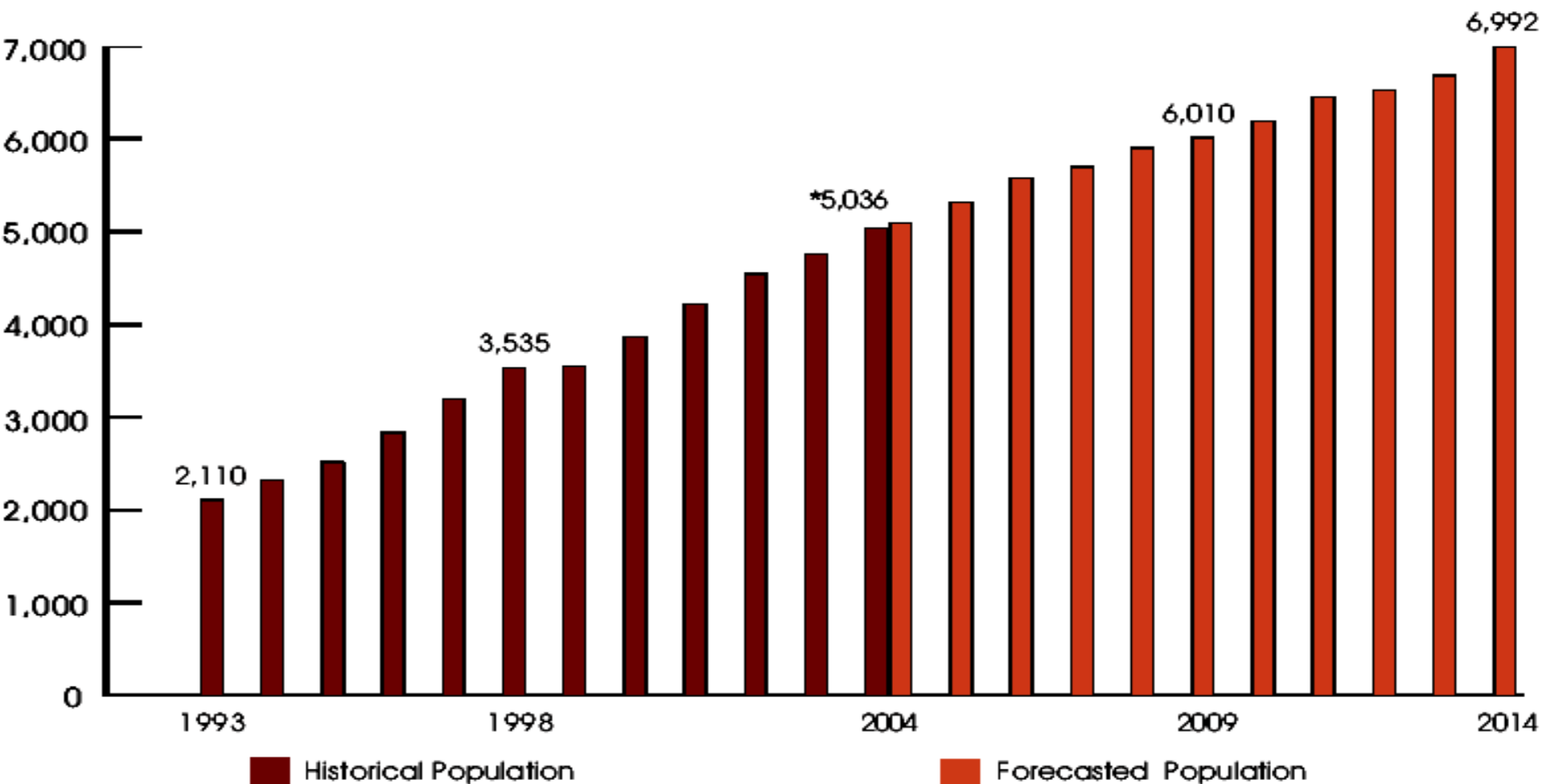
# Correctional Population Forecast, 2004-2014

**Current Figures:** As of June 30, 2004, DOC was responsible for a total of 4,955 inmates. Of these inmates 1,013 were housed in local/regional jails. While 3,942 inmates were located in a DOC facility.

- Thus, the DOC responsible population is forecasted to grow at an *average* annual growth rate of 3.2% over the next decade.
- This corresponds to an average of 190 additional inmates per year.
- Taking into account known error in forecast estimates since January 2001, we can expect the true average to fall between 183 and 197 additional inmates per a year over the next ten years.

# Correctional Population Forecast, 2004-2014

2004 State Prison Population Forecast



# Conclusions

- WV's rate of incarceration continues to grow at a rate greater than the national average and most other states.
- The DOC responsible population in WV is expected to increase over the next decade, but at a rate less than what was observed during the mid to late 1990's.
- Increases will continue, despite decreases in arrests for all major crime categories in recent years.
  - WV Incident-Based Reporting System, 2000-2003
    - Total Arrests in WV: 19,169 to 17,345 = -9.5%
    - Violent Crime Index Arrests in WV: 2,113 to 1,484 = -29.8%
    - Property Arrests in WV: 4,208 to 3,906 = -7.2%
    - NonIndex Arrests in WV: 12,848 to 11,955 = -7.0%
- Comparisons of actual population counts versus forecast estimates have shown previous projections to be rather accurate.



# Conclusions

- Violent offenders comprised 52.2% of state inmates in 2004, compared to 49.3% nationally in 2001.
- Violent offenders, however, constituted a smaller proportion of WV inmates in 2004 compared to 2002 figures.
- In terms of admissions into DOC facilities, the proportion of violent offenders declined as nonviolent offenders increased between 1998-2003.